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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/321,594	05/28/1999	ALAN J. DEMERS	50277-313	6698

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EXAMINER

ROMERO, ALMARI C

ART UNIT	PAPER NUMBER
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2176

DATE MAILED: 05/20/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/321,594

Applicant(s)

DEMERS ET AL.

Examiner

Almari Romero

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 May 1999 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6 and 7.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to communications: Application filed on 5/28/99, which has priority filed on 5/28/98.
2. Claims 1-10 are pending in the case. Claims 1 and 9 are independent claims.

Drawings

3. The drawings are objected to because of PTO-948 form. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Information Disclosure Statement

4. The references listed in the Information Disclosure Statements filed on 7/24/01 and 12/26/01 have been considered.

Specification

5. The disclosure is objected to because of the following informalities:

On page 1, "Related Applications" section of the specification, Applicant is reminded to insert related applications serial numbers and the status of each application, if allowed or in patent prosecution.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bauer et al. (USPN 5,870,765) in view of Downing et al. (USPN 6,289,335 B1).**

Regarding independent claim 1, Bauer et al. (Bauer) discloses:

A method of propagating changes to a table (Bauer on col. 2, lines 5-21: teaches propagating changes between server database and client database), comprising the steps of:

maintaining a first copy of the table at a first site (Bauer on col. 4, lines 55-63 and col. 7, lines 39-52: teaches replicated table in client database);

maintaining a second copy of the table at a second site (Bauer on col. 4, lines 55-63 and col. 7, lines 39-52: teaches replicated table in server database); and

transmitting changes of the first copy of the table from the first site to the second site (Bauer on col.2, lines 58-67 and col. 4, lines 13-16: teaches server transmits refresh data to the client);

updating the second copy of the table at the second site based on the transmitted changes (Bauer on col. 2, lines 58-67: client modifies tabular database with the refresh data sent by the server to bring the two databases into synchronization);

Bauer does not explicitly disclose “the first copy of the table and the second copy of the table have at least one non-overlapping column”. However, Downing et al. (Downing) on col. 8,

line 65 - col. 9, line 26: teaches snapshot only shows a subset of a table and additional information not relevant for the user to view is stored in columns in the snapshot itself and will not be displayed to the user.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified Downing into Bauer to provide a way for the user not to view irrelevant information from the updated table, since it will reduce time it takes to display the periodical changes in a database system environment.

Regarding dependent claim 2, Downing discloses:

wherein the non-overlapping column is present in the first copy and missing in the second copy (Downing on col. 8, line 65 – col. 9, line 26: teaches master site and snapshot site which the snapshot site will contain a view of a table but not showing additional administrative information stored in columns).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified Downing into Bauer to provide a way for the user not to view irrelevant information from the updated table, since it will reduce time it takes to display the periodical changes in a database system environment.

Regarding dependent claim 3, Bauer discloses:

wherein the non-overlapping column is missing in the first copy and present in the second copy (Bauer on col. 4, lines 55-63: teaches maintaining private data including rows or columns on either client or server, which is not shared between databases).

Regarding dependent claim 4, Downing discloses:

comprising the step of reconciling differences in the column shape of the first copy and the column shape of the second copy for the transmitted changes (Downing on col. 3, line 61 – col. 4, line 9: teaches reconciling differences between first table and second table).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified Downing into Bauer to provide a way to determine differences between updated and change tables, since it will reduce process time when performing refresh operation.

Regarding dependent claim 5, Downing discloses:

comprising the step of defining a top flavor describing overlapping columns and non-overlapping columns of the table (Downing on col. 3, line 42 – col. 4, line 9 and col. 9, lines 15-26: snapshot includes what a user can view which can be a subset of a table (overlapping columns) or may not have to view irrelevant information which is stored in columns in the snapshot itself but its not displayed in the view (non-overlapping columns)).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified Downing into Bauer to provide a way for the user not to view irrelevant information from the updated table, since it will reduce time it takes to display the periodical changes in a database system environment.

Regarding dependent claim 6, Bauer discloses:

comprising the steps of: defining a first flavor describing the columns of the first copy; and transmitting an indicator of the first flavor from the first site to the second site (Bauer on col. 2, lines 5-21: teaches determining what modifications have been made by comparing new data

item with the before-image, changes are determined by the server to resolve any conflicts and send a refresh data to the client).

Regarding dependent claim 7, Bauer discloses:

comprising the steps of : defining a second flavor describing the columns of the second copy (Bauer on col. 2, lines 5-21: teaches determining changes that have taken place to the server data);

and wherein the step of updating the second copy of the table at the second site based on the transmitted changes includes the step of updating overlapping columns between the first flavor and the second flavor in the second copy of the table (Bauer on col. 4, lines 13-16 and col. 7, lines 39-52: teaches server can be updated by another node based on the data sent by the client and determining database modifications to complete the synchronization process).

Regarding dependent claim 8, Downing discloses:

the step of maintaining a first copy of the table at a first site includes the step of maintaining an updatable snapshot at a laptop computer site (on col. 8, line 65- col. 9, line 14: teaches updateable snapshot);

and the step of maintaining a second copy of the table at the second site includes the step of maintaining a master table at a master site (on col. 3, line 42 – col. 4, line 9: teaches maintaining a master table).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified Downing into Bauer to provide a way to update tables and maintain replicas copy of each table in different sites, since it would improve the accuracy of information transmitted between sites.

Regarding independent claim 9, Bauer in combination with Downing disclose the invention substantially as claimed.

Bauer discloses:

A method of modifying a table to drop a first column and add a second column, said table being replicated at a plurality of sites (Bauer on col. 7, lines 39-52: teaches not all columns of the corresponding tables are replicated), comprising the steps of:

(a) defining a first flavor for a first site, said first flavor describing the table as having both the first column and the second column (Bauer on col. 3, lines 12-24: teaches replicated column on the server and the replica column on the client have same value);

(b) adding the second column to the table at the first site, so that the table contains both the first column and the second column (Bauer on col. 4, lines 13-16 and lines 55-63: teaches columns can be updated by one node to another node to have replicated database tables);

(c) defining a second flavor for a second site, said second flavor describing the table as having the second column but not the first column (Bauer on col. 4, lines 55-63: teaches allowing user to maintain private data, includes columns on either client or server which is not shared between databases);

(f) maintaining replication activities (Bauer on col. 2, lines 23- 67: teaches replication) while performing steps (a), (b), (c), (d), and (e).

However, Bauer does not explicitly disclose “dropping the first column and adding the second column to the table at the second site” and “defining the second flavor for the first site and dropping the first column from the table at the first site”. Downing on col. 9, lines 15-26:

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teaches not all information from the snapshot needs to be displayed and viewed by the user.

Irrelevant information stored in columns is in the snapshot itself but is not displayed. Only a subset of the snapshot table is displayed.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified Downing into Bauer to provide the ability to determine what information can or cannot be viewed by the user in a shared database system, since it would decrease the refresh time when synchronizing first table and second table.

Regarding dependent claim 10, Bauer discloses:

transmitting changes to the table from the first site to the second site; and (Bauer on col. 2, lines 58-67: teaches refresh data transmitted to the client)

updating the second copy of the table at the second site based on overlapping columns between the first flavor and the second flavor (Bauer on col. 2, lines 5-21: teaches updating existing data item with new data item).

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Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

USPN 5,220,657 – Bly et al. discloses multi-user environment viewing identical or not necessarily all identical information at the same time.

USPN 6,003,067 – Suzuki et al. discloses units of data are not displayed on the screen due to hiding, from one computer system to another computer system.


USPN 6,006,239 - Bhansali et al. discloses multiple user modifying spreadsheets simultaneously.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Almari Romero whose telephone number is (703) 305-5945. The examiner can normally be reached on Mondays - Thursdays (7:30am - 6:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon can be reached on (703) 308-5186. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

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May 8, 2002


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